



VOLVO

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Area

[41879]

Machine Id

VOLVO A40G 353415

Component

Diesel Engine

Fluid

VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP449774	---	---
Sample Date		Client Info		15 Apr 2024	---	---
Machine Age	hrs	Client Info		977	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---

WEAR

Exhaust valve wear is indicated.

Iron	ppm	ASTM D5185m	>100	17	---	---
Chromium	ppm	ASTM D5185m	>20	<1	---	---
Nickel	ppm	ASTM D5185m	>2	▲ 16	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m	>2	0	---	---
Aluminum	ppm	ASTM D5185m	>25	1	---	---
Lead	ppm	ASTM D5185m	>40	2	---	---
Copper	ppm	ASTM D5185m	>330	136	---	---
Tin	ppm	ASTM D5185m	>15	<1	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	10	---	---
Potassium	ppm	ASTM D5185m	>20	4	---	---
Fuel	%	ASTM D3524	>6.0	0.6	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.2	---	---
Nitration	Abs/cm	*ASTM D7624	>20	8.1	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.5	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---

FLUID CONDITION

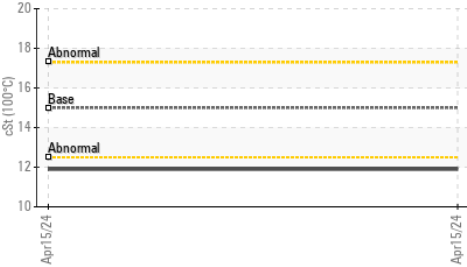
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		4	---	---
Boron	ppm	ASTM D5185m	2.5	36	---	---
Barium	ppm	ASTM D5185m	0.0	0	---	---
Molybdenum	ppm	ASTM D5185m	0.7	46	---	---
Manganese	ppm	ASTM D5185m	0.0	2	---	---
Magnesium	ppm	ASTM D5185m	256	383	---	---
Calcium	ppm	ASTM D5185m	2057	1658	---	---
Phosphorus	ppm	ASTM D5185m	935	867	---	---
Zinc	ppm	ASTM D5185m	1223	977	---	---
Sulfur	ppm	ASTM D5185m	4079	3204	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.9	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	10	8.3	---	---
Visc @ 100°C	cSt	ASTM D445	15.0	● 11.9	---	---

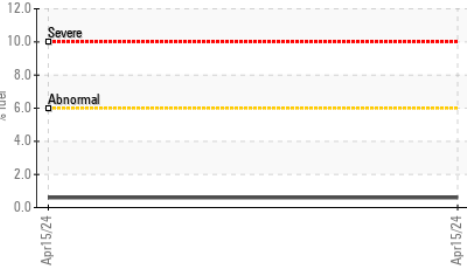
▲ Ferrous Alloys



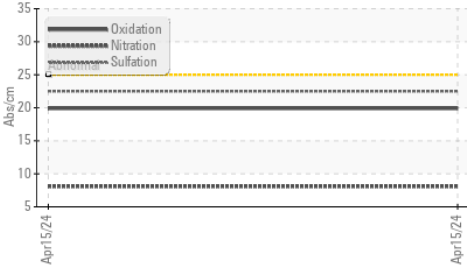
● Viscosity @ 100°C



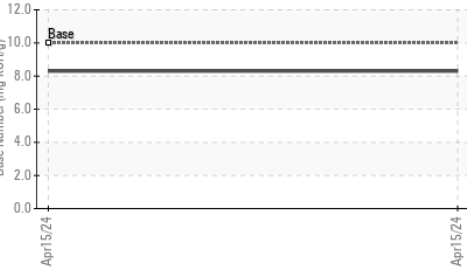
Fuel Dilution



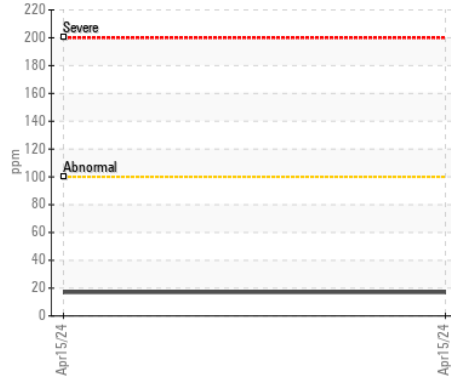
FT-IR (Direct Trend)



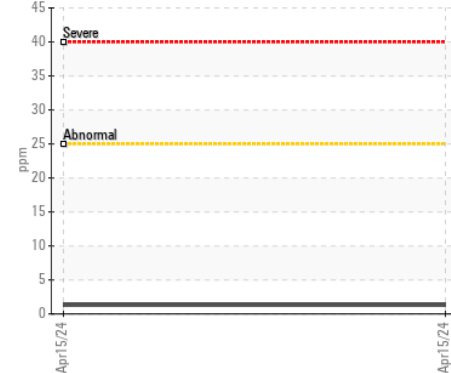
Base Number



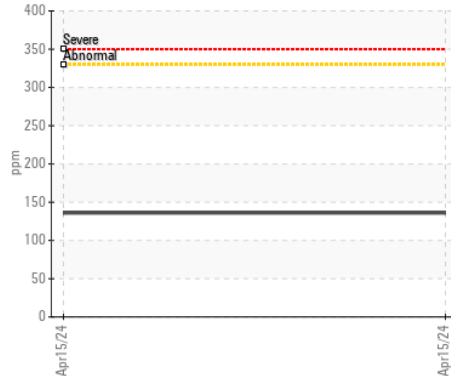
Iron (ppm)



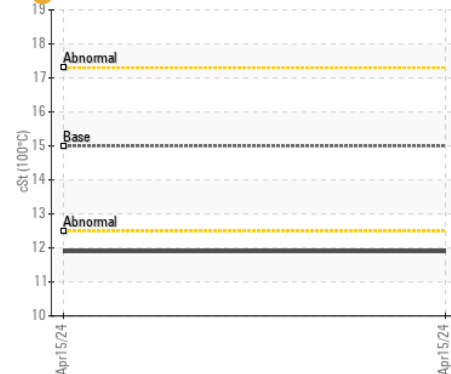
Aluminum (ppm)



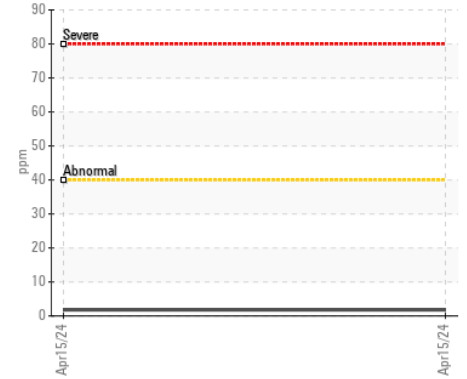
Copper (ppm)



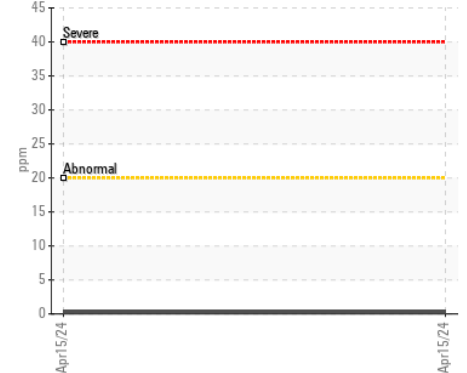
● Viscosity @ 100°C



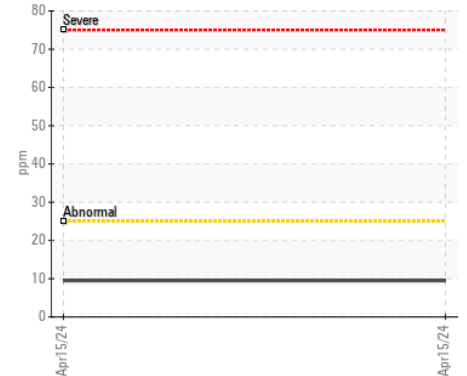
Lead (ppm)



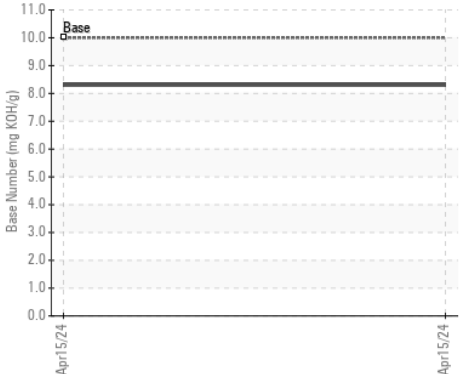
Chromium (ppm)



Silicon (ppm)



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : VCP449774
 Lab Number : 06151579
 Unique Number : 10981657
 Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN)

215 - ASCENDUM MACHINERY INC - CAYCE
 2303 AIRPORT BLVD
 CAYCE, SC
 US 29033
 Contact: TAMI BROWDER

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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